

**Takasi YAMAZAKI*: New or noteworthy plants of
Scrophulariaceae from Indo-China (2)****

山崎 敬*: インドシナ産ゴマノハグサ科植物の新知見 (2)**

7. ***Lindernia cerastioides* Yamazaki, nom. nov.**

Torenia cambodgiana Bonatii n Bull. Soc. Bot. France ser. 4, 8: 513 (1908), in Fl. Gén. Indo-Chine 4: 404, f.44, 5-10 (1927).

Hab. Cambodia: Thepong, cresit in locis humidis (Pierre, no. 1161, type in P).

The genus *Lindernia* All. is very close to *Torenia* L., and it is difficult to distinguish them clearly. The former, however, is generally characterized by the small corolla and the glabrous ovary, while the latter has the large corolla and the ovary with minute hairs at the upper part. It is generally possible to draw a line between them by the characters above mentioned. Consequently, *Torenia cambodiana* having the small corolla and the glabrous ovary should belong to *Lindernia*.

The epithet *cambodgiana* can not be used under *Lindernia* by the presence of earlier homonym.

8. ***Lindernia junciformis* (Bonati) Yamazaki, comb. nov.**

Geoffraya junciformis Bonati in Nat. Syst. 1: 334 (1911), in Fl. Gén. Indo-Chine 4: 385, f. 44, 3-4 (1927), Kerr in Fl. Siam. Enum. 3: 67 (1954).

Geoffraya cuspidata Bonati in Nat. Syst. 1: 334 (1911), in Fl. Gén. Indo-Chine 4: 387 (1927), pro parte, excl. Annam specimen of Robinson and figs. Syn. nov.

Hab. Cambodia: Phom Léo (Geoffray, no. 489, type of *Geoffraya junciformis* Bonati in P), Monte de Pursat (Geoffray, 1875, s.n., P), Var Puong á Pum Veal (Couderc, 1883-85, s.n., P).

Thailand: Northeastern, Nong Kay (Thorel, 1866-68, s.n., type of *Geoffraya cuspidata* Bonati in P).

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** Continued from Journ. Jap. Bot. 53: 1-11, 1978.

The genus *Geoffraya* Bonati has been distinguished from its allied genera, *Lindernia* and *Torenia*, by the linear leaves and the membranous swollen calyx with subulate 5-teeth. These characters, however, are not adequate and insufficient to separate the genus. *Geoffraya junciformis*, the type of the genus, has the small corolla and the glabrous ovary as those of *Lindernia*, and is closely related with the species belonging to the section *Torenioides* of *Lindernia*. Therefore, this genus should be combined with *Lindernia*.

Geoffraya cuspidata Bonati has been separated from *G. junciformis* Bonati by the diffuse stem and the posterior lip of the corolla cuspidate at the apex. Whether the stem diffuse or not seems to be ecological, and both species have the same structure of the corolla with upper lip bilobed. They should be treated as conspecific.

The specimen of Robinson from Annam, determined as *G. cuspidata* by Bonati and his figures (Fig. 44, 1-2 in Fl. Gén. Indo-Chine 4 : 386) of *G. cuspidata*, are *Lindernia saginiformis* (Bonati) Bonati.

9. ***Lindernia kerrii*** Yamazaki, nom. nov.

Geoffraya purpurea Kerr ex Barnett in Kew Bull. 16 : 486 (1963).

Hab. Thailand. Rachasima : Buriram, Talung, ca. 100 m, open sandy grounds (Kerr, no. 8224, Jan. 7, 1924, type in K).

This species is associated with *Lindernia laotica* Bonati rather than *Lindernia junciformis*. The epithet *purpurea* can not be used by presence of the earlier homonym.

10. ***Scolophyllum*** Yamazaki, gen. nov.

Herba perrenis. Folia opposita aristato-serrata vel pinnatifida. Inflorescentia terminalis breviter racemosa. Bractee lineari-lanceolatae setaceo-acuminatae. Calyx cylindricus usque ad medium 5-lobatus, lobis lineari-lanceolatis setaceis. Corolla bilabiata, tubo graciliter cylindrico, extus dense glanduloso-villoso, limbo explanato, labio superiore oblongo vel oblongo-ovato, labio inferiore dilatato trilobato, lobo medio rotundato emarginato. Stamina 2 perfecta propinqua ad faucem superiorum inserta, filamentis brevibus glabris, antheris inaequiter bilocularis. Staminodia 2, ad faucem inferiorum inserta divaricata, breviter clavata vel mammiformia. Ovarium cylindricum glabrum. Stylus filiformis; stigma flabellata bilamellata. Capsula immatura anguste cylindrica acuminata.

Typus: *Scolophyllum ilicifolium* (Bonati) Yamazaki.

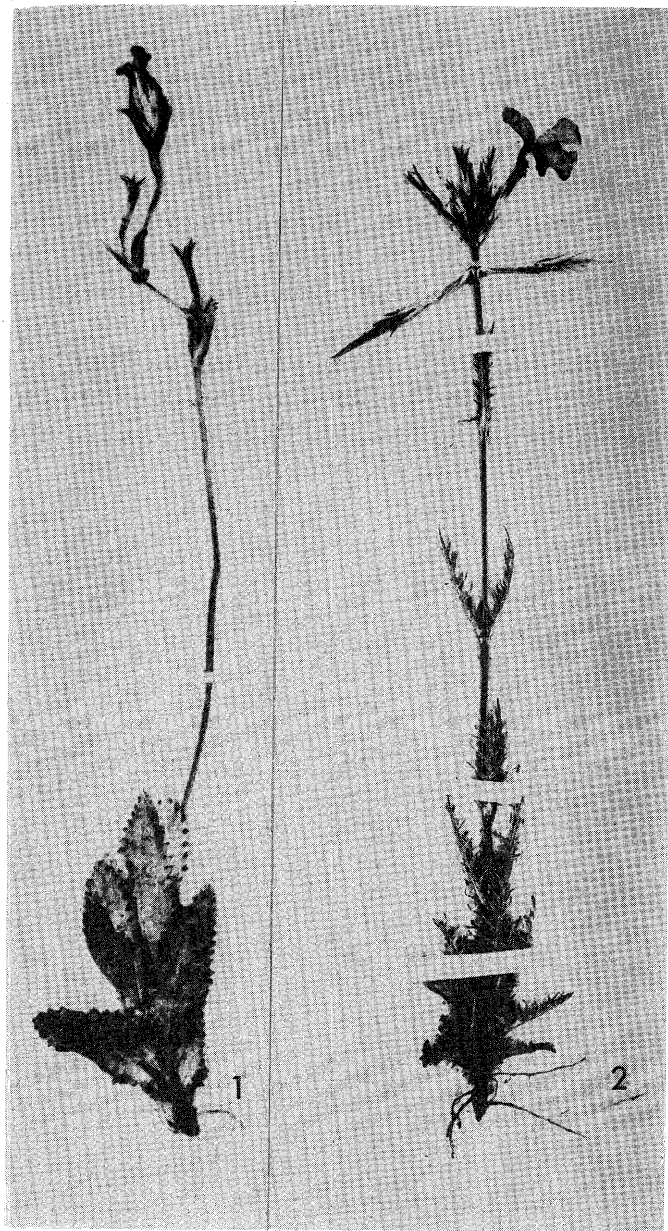


Fig. 1. 1, *Scolophyllum ilicifolium*. Type, Harmand, s. n. in P, mag. nat.
2, *Scolophyllum spinifidum*. Lakshnakara, no. 1058 in ABD, mag. nat.

This genus is closely related to the genus *Lindernia*, especially to subgen. *Bonnaya*, but differs from the latter by having the slender corolla-tube covered with densely glandular hairs, the explanated corolla-limb and the breast-shaped staminodes. These characters are sufficiently distinctive features to separate the genus.

1. Leaves aristate-serrate. Corolla subcarnose; posterior lip oblong-ovate, 3 mm long, 2 mm wide; anterior lip 4 mm long, 8 mm wide... *S. ilicifolium*
1. Leaves pinnatifid. Corolla membranous; posterior lip oblong, 5 mm long, 2 mm wide; anterior lip 6 mm long, 10 mm wide *S. spinifidum*

Scolophyllum ilicifolium (Bonati) Yamazaki, comb. nov. Fig. 1, 1. Fig. 2, 1-3.
Ilysanthes ilicifolia Bonati in Bull. Soc. Bot. France ser. 4, 8: 541 (1908).
Bonnaya ilicifolia (Bonati) Bonati in Fl. Gén. Indo-Chine 4: 435 (1927).
Lindernia ilicifolia (Bonati) Philcox in Taxon 19: 649 (1970).

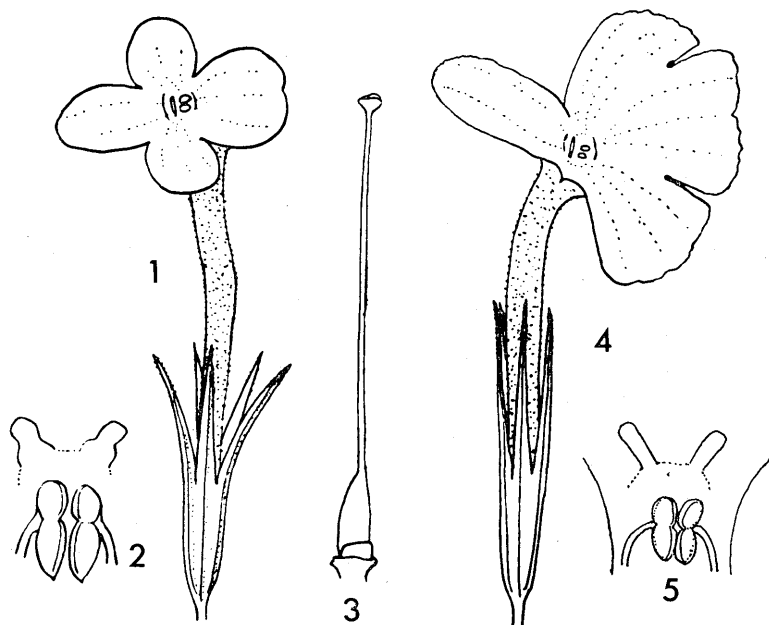


Fig. 2. 1-3, *Scolophyllum ilicifolium* (Harmand, s. n.): 1, flower, $\times 5$. 2, stamens and staminodes, $\times 20$. 3, pistil, $\times 5$ 4-5, *Scolophyllum spinifidum* (Lakshnakara, no. 1058): 4, flower, $\times 4$. 5, stamens and staminodes, $\times 20$.

Hab. Annam: Between Mekong and Hué (Harmand, s. n., Sept. 1877, type in P).

Laos: Mekong, Kemarath (Thorel, s. n., 1866-68, P).

Scolophyllum spinifidum (Kerr ex Barnett) Yamazaki, comb. nov. Fig. 1, 2. Fig. 2, 4-5.

Ilysanthes spinifida Kerr ex Barnett in Kew Bull. 16: 489 (1963).

Lindernia spinifida (Kerr ex Barnett) Philcox in Taxon 19: 649 (1970).

Hab. Thailand: Eastern, Nakhon Ratchasima, Khorat, Ban Yai (Lakshnakara, no. 1058, July 9, 1932, paratype in ABD), Khorat, Ban Chum Seng (Noe, no. 147, May 22, 1929, paratype in ABD).

11. **Schizotorenia** Yamazaki, gen. nov.

Herba. Caulis prostratus ramosus, ad nodos radicans, tetragonus. Folia opposita, simplicia, serrata. Inflorescentia ad apices ramorum sympodialium sita, laxe racemosa, pauciflora, bracteis subulatis, pedicellis gracilibus. Calyx tubulosus, 5-partitus, 5-striatus vel anguste 5-alatus, laciniis lanceolato-linearibus acuminatis 1-costatis. Corolla magna, tubo elongato cylindrico sursum apicem dilatato, labio postico orbiculato, labio antico trilobato. Stamina 4, perfecta, 2 posticis brevibus, 2 anticis longioribus basi appendiculatis, antherarum loculis triangularibus acutis. Ovarium oblique oblongum acutum glabrum. Stylus filiformis; stigma flabellata bilamellata. Capsula elliptica acuta, septicido-dehiscens. Semina ovalia, longitudinaliter 8-sulcata, reticulata.

Typus: *Schizotorenia finetiana* (Bonati) Yamazaki.

This genus is closely related to the genus *Torenia*, but differs from the latter by the deeply lobed calyx with slender sepals and the glabrous ovary. These characters resemble those of *Lindernia*, but differs from the latter by the large corolla with the corolla-tube being slender at the lower half and swollen towards the apex. Therefore, it can not be referred neither to *Torenia* nor *Lindernia* and should be treated to maintain the separate genus.

1. Leaves lanceolate, attenuate to the petiole, appressedly mucronate-serrate *S. finetiana*
1. Leaves deltoid-ovate, cuneate to truncate at the base, acute-serrate *S. atropurpurea*

Schizotorenia finetiana (Bonati) Yamazaki, comb. nov. Fig. 3, 2. Fig. 4.

Torenia finetiana Bonati in Bull. Soc. Bot. Genève 5: 312 (1913) not seen,

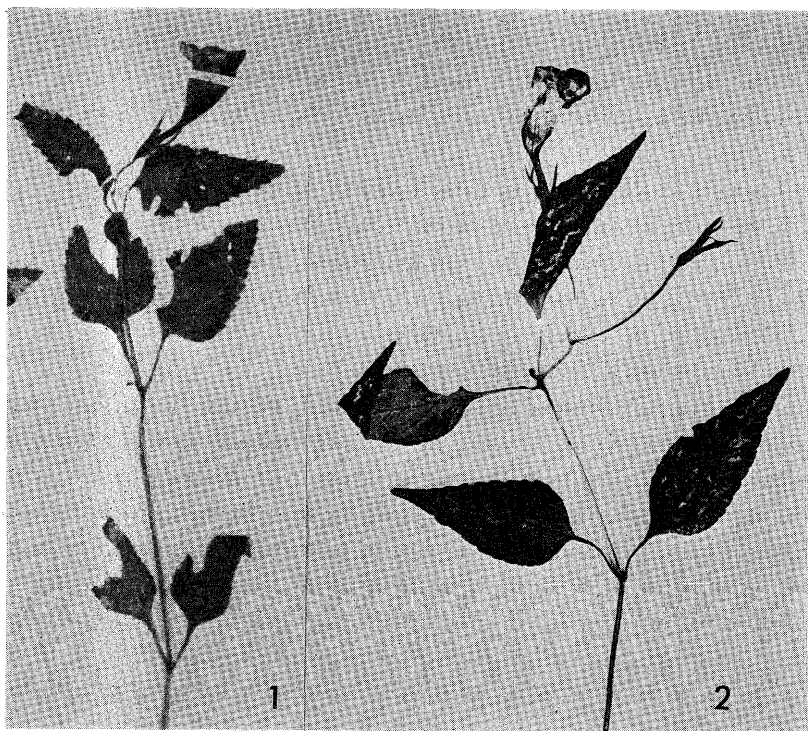


Fig. 3. 1, *Schizotorenia atropurpurea*. Kerr, no. 7771, $\times 0.5$. 2, *Schizotorenia finetiana*. Evrard, no. 308, $\times 0.4$.

in Fl. Gén. Indo-Chine 4: 392 (1927).

Torenia evrardi Bonati in Bull. Soc. Bot. France ser. 4, 24: 1097 (1924), in Fl. Gén. Indo-Chine 4: 392 (1927).

Artanema finetianum (Bonati) Yamazaki in Journ. Jap. Bot. 28: 34, fig. 1. (1953).

Artanema evrardi (Bonati) Yamazaki in Journ. Jap. Bot. 28: 36 (1953).

Hab. Vietnam: Annam, Dalat (Lecomte & Finet, no. 1936, Sept. 27, 1911, type of *Torenia finetiana* Bonati in P; Evrard, no. 308, Oct. 23, 1920, type of *Torenia evrardi* Bonati in P; Hayata, no. 639, Jun. 10, 1921, TI). Hué (Eberhardt, no. 1789, Dec. 12, 1912, P).

Schizotorenia atropurpurea (Ridley) Yamazaki, comb. nov. Fig. 3, 1.

Torenia atropurpurea Ridley in Journ. Roy. As. Soc. Str. Br. 49: 24 (1907)

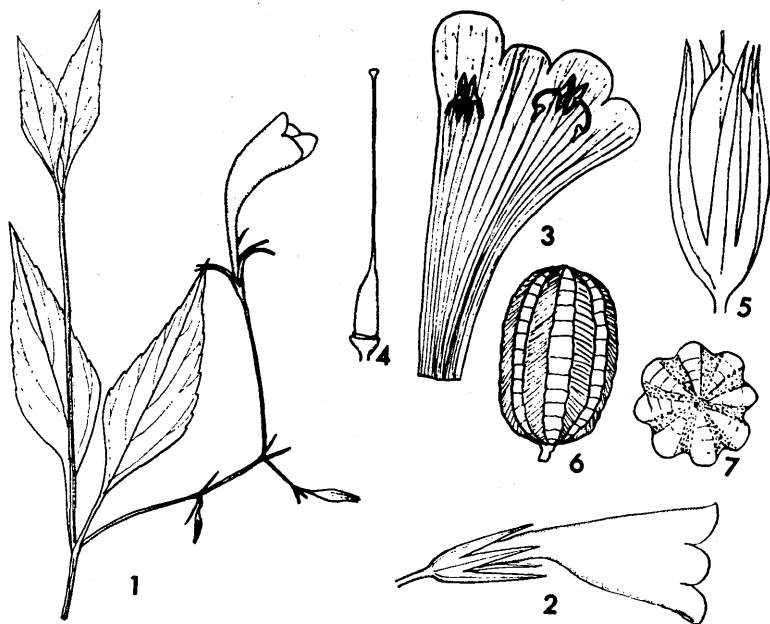


Fig. 4. *Schizotorenia finetiana*: 1, a part of stem, $\times 0.5$. 2, flower, $\times 1$. 3, corolla opened, $\times 1.2$. 4, pistil, $\times 1.2$. 5, capsule with persistent calyx, $\times 2.5$. 6, seed, lateral view, $\times 40$. 7, seeds, apical view, $\times 40$. 1-2, Eberhardt, no. 1789. 3-4, Hayata, s. n.. 5-7, Lecomte & Finet, no. 1936.

not seen, in Bot. Mag. t. 8388 (1911), Fl. Mal. Penins. 2: 483 (1923); Kerr, Fl. Siam. Enum. 3: 68 (1954).

Hab. Thailand: Peninsular, Pattani, Kao Kalakiri, ca. 900 m, open evergreen forests (Kerr, no. 7771, Sept. 10, 1923, K), Pattani, Betong, ca. 200 m (Kerr, no. 7612, Aug. 13, 1923, K).

Distr. Malay peninsular.

12. *Torenia siamensis* Yamazaki sp. nov. Fig. 5 & 6.

Torenia asiatica auct. non L., Kerr in Fl. Siam. Enum. 3: 68. 1954.

Herba annua. Caulis laxè ramosus, erectus, 20-60 cm altus, tetragonus, angustissime alatus, glaber. Folia chartacea, sessilia vel brevissime petiolata, saepe semi-amplexicaulia, lanceolata vel oblongo-lanceolata, apice acuminata, basi obtusa, rotundata vel saepe subcordata, 2.5-6.5 cm longa, 0.8-2.2 cm lata, adpresse mucronate serrata, supra scabrida, subtus ad nervos

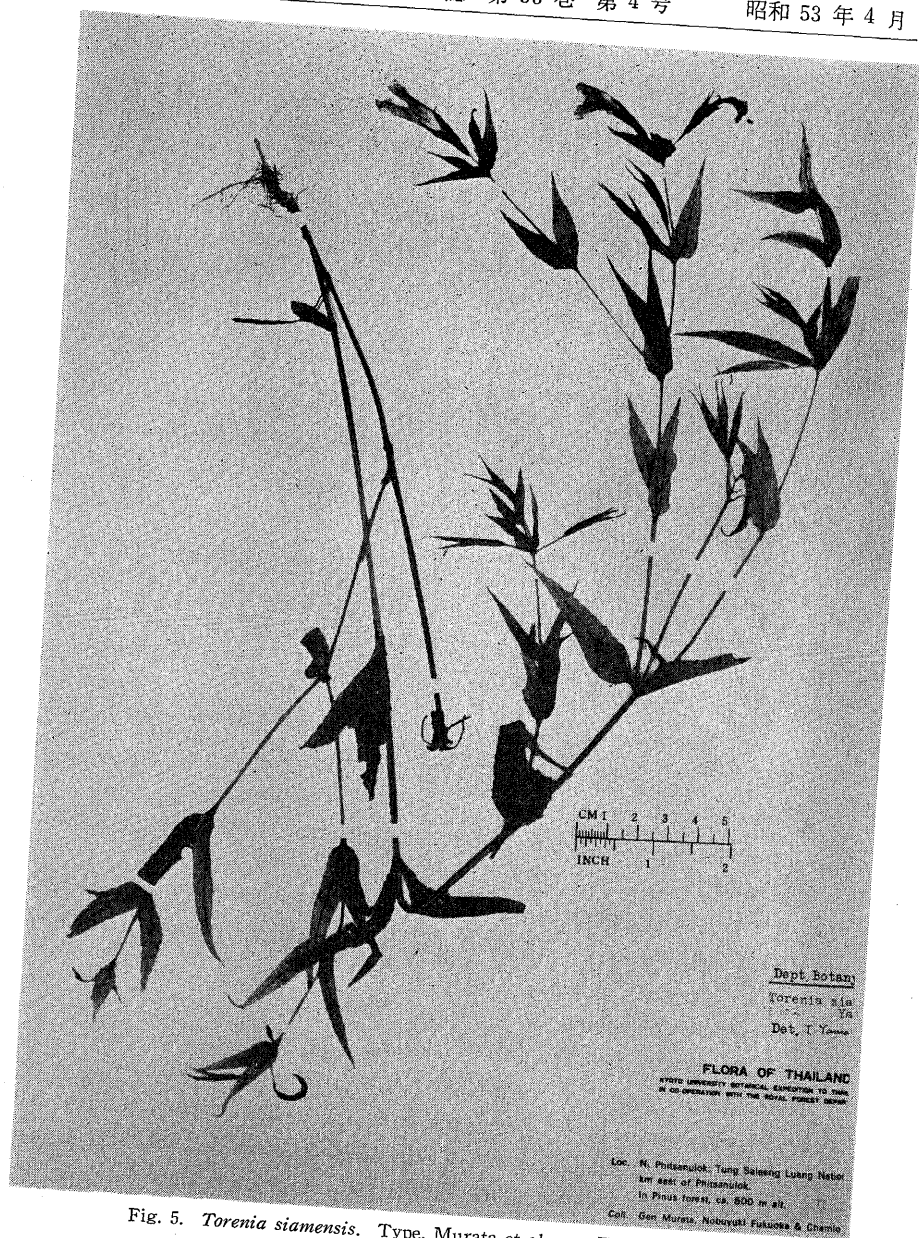


Fig. 5. *Torenia siamensis*. Type, Murata et al., no. T-1715 in KYO.

sparsissime pilosa. Flores pseudo-axillares, 1-6 ad axillas foliorum superiorum congregati; bracteae lineares, setaceae, 1-3 mm longae; pedicelli 5-15 mm longi, tetragoni, anguste alati, glabri. Calyx anguste cylindricus, 18-25 mm longus, bilabiatus, 5-striatus, minutissime scabridus, lobis lanceolatis acuminiatis, tubo subaequilongis. Corolla atrovioleacea, 30-35 mm longa, labio postico

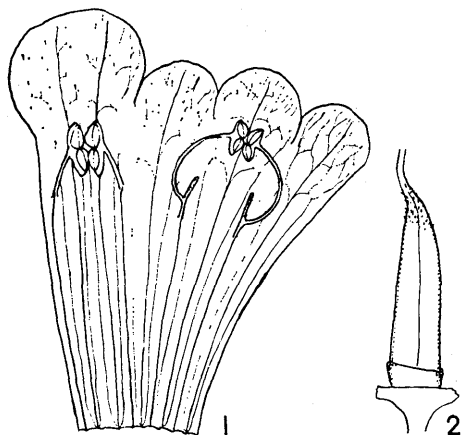


Fig. 6. *Torenia siamensis*: 1. Corolla opened, $\times 1.7$
2. Ovary, $\times 5$.

late orbiculato, ca. 10 mm longo 12 mm lato, labio antico ca. 7 mm longo 15 mm lato, trilobato, lobis orbiculatis ca. 4 mm longis et latis. Stamina 4 perfecta, filamentis posticis 3 mm longis, filamentis anticis 6 mm longis, appendicibus filiformibus 2 mm longis sparse punctatis circiter 1 mm supra basin exortis. Capsula cylindrica, apiculata, 12 mm longa 3 mm lata. Semina ellipsoidea, scrobiculata, 0.5 mm longa 0.35 mm lata.

Hab. Thailand. Northern: Phitsanulok, Tung Salang Luang (Murata, Fukuoka et Phengkklai, July 25, 1973, no. T-1715, typus in KYO). Eastern: Chaiyaphum, Tunkamang (van Beusekom et al., Dec. 14, 1971, no. 4205, KYO; K. Larsen et al., Aug. 9, 1972, no. 31631, AAU). Peninsular: Khao Phra Mi (K. Larsen et al., July 10, 1972, no. 30853, AAU).

Ecology. In scrubs, near swamp in dry Dipterocarpus forests, in Pinus forests, at altitudes of 500 m to 1100 m.

This species closely resembles *T. asiatica* L. of southern India, but is distinct from the latter in having the sessile leaves and the calyx with 5-costate ridges, not alate.

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アゼトウガラシ属 *Lindernia* とハナウリクサ属 *Torenia* とは非常に近縁で、はっきり区別することはむずかしい。一般にアゼトウガラシ属は、花が小さく、子房は全く無毛であるが、ハナウリクサ属は、花が大きく、子房の上部に微細な毛がはえるので区別

できる。この点からすると *Torenia cambodgiana* はアゼトウガラシ属に入れるべきである。*Geoffraya* 属はインドシナから Bonati 氏が *G. junciformis* をもとに新属として報告したものである。氏によると、アゼトウガラシ属やハナウリクサ属からは、葉が線形、がくは膜質で先は切形となり、その縁に線形のがく裂片がある点で異なっている。然しこれらの性質はそれぞれアゼトウガラシ属やハナウリクサ属の種類の中に見いだせるもので、特に属を区別する特徴にはなりえないと思う。*Geoffraya purpurea* はタイから報告された種類であるが、がくや果実の形からすると *G. junciformis* よりも、ラオスの *Lindernia laotica* Bonati に近縁のものである。

ラオスの *Lindernia ilicifolia* とタイの *L. spinifida* とはスズメノトウガラシに類縁があるが、花筒が細長く外面に腺毛が密生し、唇弁は広く開出し、仮雄蕊は小さく痕跡的であるなど、アゼトウガラシ属には見られない特徴をもつので、別の属として区別した方がよいと考える。アゼトウガラシ亜属の *Acleatae* 節に最も近縁である。

ベトナムの *Torenia finetiana* とマレー半島の *Torenia atropurpurea* とは、外見はハナウリクサ属に近いが、がくは深くさけて裂片は細長く、子房が無毛であり、花冠は下半部が細長く上半部が著しく広がるなど、ハナウリクサ属の他のものに見られない性質である。アゼトウガラシ属からは、花冠が大きく形も異なるので、いずれにも属さない新属 (*Schizotorenia*) としてあつかうのが適当と考える。

Torenia siamensis はタイに広く分布し、*T. asiatica* L. とされていたが、南インドの後者からは明らかに区別される種類であり、アンナンの *T. hayatae* Bonati と *T. chevalieri* Bonati に近縁である。標本を借りるにあたって、京都大学の岩槻邦男氏に御世話になったことを、深謝します。

□G. F. J. PABST et F. DUNGS: *Orchidaceae Brasilienses I and II*. pp. 408+418 (内 color pls. 121, line pls. 197) Kurt Schmiersow, Hildesheim, Deutschland (1977). ¥52,800. ブラジルのランを網羅したもので、190属 2283種のほとんどを、色刷の図版 121 ページと、それ以外のを線画の図版 197 に収めてある。水彩画で改めて描れたものだし、線画の方も、著者が花の解剖図を一々描き下ろしたもののだけに、まことに貴重であり、同時にまた見ても十分に堪能できる。これだけの種類が同一の著者によって一覧されたことは珍らしいので、一貫した見方がされているのはたしかに一つの長所でもある。記事はポルトガル語、独逸語、及び英語の三列に並べてあり、ブラジルにおけるラン科の発展、展開、四つの気候的区分、三つの生態系、ブラジルのラン科の探求及び研究史 (フンボルト及びボンブランドの探検 1799-1804, 1808-1906, その後の研究と採集にわけて述べられている) 等を述べ、大部分を分類と図版にとさいている。科属誌は同じく三ヶ国語で述べ、大きな属は細かい alliance に分けられ、属や節の名は赤字で印刷するなど新機軸を出し、また図版のあとには属の検索表、異名表も出ている。いずれにしてもよくまとめたもので、ブラジルのランひいては世界のランに関係する人には欠かすことのできない出版物といえる。(前川文夫)